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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/507,026

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Franca Leo

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EXAMINER

VALENTI, ANDREA M

ART UNIT

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3643

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12/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/507,026	Applicant(s) LEO, FRANCA	
	Examiner Andrea M. Valenti	Art Unit 3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 8 recites the broad recitation 0.5 to 3, and the claim also recites preferably 1 to 2 which is the narrower statement of the range/limitation. In the present instance, claim 11 recites the

broad recitation 1:6 to 2:1, and the claim also recites preferably 1:6 and 1:1 which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7, 9-11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,419,283 to Leo in view of U.S. Patent No. 6,178,922 to Denesuk and U.S. Patent Pub. No. US 6,926,916 to Day et al. and U.S. Patent No. 6,586,027 to Axelrod and The Chestnut Comes out of its Shell, The New York Times (nytimes.com), by Melissa Clark, [retrieved from internet 12 December 2007] 24 November 1999, 3 pages.

Regarding Claims 1, 2, 3, and 13, Leo teaches a chewable toy for animals, which can be produced by the moulding into a desired configuration of a mixture comprising: 100 parts by weight of a degradable polymeric composition comprising a starchy material (Leo abstract line 5) and a degradable ethylene copolymer. Leo teaches the polymeric composition includes plasticizer in a quantity of between 10-40% by weight, the plasticizer being selected from the group consisting of sucrose, maltose, fructose, and mixtures thereof (Leo Col. 1 line 49-54 and Col.1 line 35-36).

Leo teaches the addition of edible lubricants, vitamins, proteins, mineral salts, flavouring, therapeutic substances, dental care products, products that enhance

attractiveness of the toy (Leo Col. 2 line 46-50 and Col. 1 line 55-61), but is silent on explicitly teaching from 0.5 to 5 (or 1 to 3) parts by weight of garlic or derivatives thereof. However, Denesuk teaches that it is old and notoriously well-known to incorporate garlic additives to animal toys (Denesuk Col. 4 line 28-31 and Col. 15 line 19-21; claim 49, 50, 68). It would have been obvious to one of ordinary skill in the art to modify the teachings of Leo with the teachings of Denesuk at the time of the invention since the modification is merely the addition of a flavouring agent/a natural anti-microbial agent as taught by Denesuk. It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo through routine tests and experimentation to derive a desired ratio of garlic to optimize the composition since applicant has not established a criticality to this ratio.

Leo teaches that the plasticizer is selected from edible polyhydric alcohols (Leo Col. 1 line 52). Isomalt is a polyhydric alcohol, but Leo is silent on explicitly identifying isomalt. However, it would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo at the time of the invention since the modification is merely an engineering design choice involving the selection of a known alternate polyhydric alcohol selected based on cost, availability, and/or known tooth friendly properties such as preventing plaque and cavities.

It can further be interpreted from another perspective, that Leo teaches the addition of vitamins, proteins, mineral salts, flavouring, therapeutic substances, dental care products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50), but is silent on explicitly identifying isomalt. However, Day teaches that it is notoriously

well-known that isomalt is known bulk sweetening agent in a chewing substance (Day Col. 8 line 8-14). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo with the teachings of Day at the time of the invention since the modification is merely an engineering design choice involving the selection of a known flavouring ingredient to provide a sweet flavour to the toy. Furthermore, isomalt has known beneficial properties of preventing cavities, preventing plaque, has a dietary fiber effect on the gut. All of these beneficial properties are considered therapeutic, dental care, flavour additives as taught by Leo.

Leo as modified is silent on explicitly teaching 5 to 30 parts by weight isomalt. However, It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo through routine tests and experimentation to derive a desire ratio of isomalt to optimize the composition since applicant has not established a criticality to this ratio. Day teaches that the amount of sweetener will vary depending on the desired intensity of sweetness (Day Col. 8 line 17-25).

Leo as modified teaches edible lubricants, vitamins, proteins, mineral salts, flavouring, therapeutic substances, dental care products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50 and Col. 1 line 55-61), but is silent on explicitly teaching in which the mixture also comprises from 15 to 20, parts by weight of ground raw animal hide per 100 parts by weight of degradable polymeric composition; However, Axelrod teaches the combination of rawhide with starches and polymers for forming a pet chew toy (Axelrod abstract; Col. 2 line 26-28). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo with the

teachings of Axelrod at the time of the invention since the modification is merely the addition of a flavouring agent to attract a pet's interest. It would have been obvious to one of ordinary skill through routine tests and experimentation to derive the desired ratio of proportion of agents to optimize the system.

Leo as modified teaches the addition of edible lubricants, vitamins, proteins, mineral salts, flavouring, therapeutic substances, dental care products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50 and Col. 1 line 55-61), but is silent on explicitly teaching in which the mixture also comprises from 5 to 10, parts by weight of chestnut flour per 100 parts by weight of degradable polymeric composition. However, Axelrod teaches that chestnut is used as a known herbal addition to a pet chew toy (Axelrod Col. 3 line 67), but is silent on chestnut flour. However, chestnut flour is old and notoriously well-known cooking ingredient known for its sweet nutty flavor, vitamin C and minerals, it encompasses flavor and nutrition. Clark teaches that chestnut have a unique flavor and high in complex carbohydrates. It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo at the time of the invention with the teachings of Clark since the modification is merely the addition of a known nutritious flavouring agent to enhance an animal's attention to the toy and health. It would have been obvious to one of ordinary skill through routine tests and experimentation to derive the desired ratio of proportion of agents to optimize the system.

The modifications made above are obvious modifications that are merely the use of known techniques to improve to improve similar device yielding predictable results

and choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success "obvious to try".

Regarding Claim 7, Leo as modified teaches edible lubricants, vitamins, proteins, mineral salts, flavouring, therapeutic substances, dental care products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50 and Col. 1 line 55-61), but is silent on explicitly teaching in which the mixture also in which the mixture also comprises from 0.01 to 1 part by weight of hide aroma per 100 parts by weight of degradable polymeric composition. However, Axelrod teaches the combination of starch and polymers and rawhide in combination for forming a pet chew toy (Axelrod abstract; Col. 2 line 26-28). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo with the teachings of Axelrod at the time of the invention since the modification is merely the addition of a flavouring agent to attract a pet's interest. It would have been obvious to one of ordinary skill through routine tests and experimentation to derive the desired ratio of proportion of agents to optimize the system.

Regarding Claim 9, Leo as modified teaches the starchy material is selected from the group consisting of starch, hydrolyzed starch, starch dextrin and mixtures thereof (Leo Col. 1 line 28-29).

Regarding Claim 10, Leo as modified teaches in which the degradable ethylene copolymer is selected from the group consisting of polyethylene-acrylic acid, polyethylene-vinyl alcohol and mixtures thereof (Leo Col. 1 line 43).

Regarding Claim 11, Leo as modified teaches in which the ratio by weight between the ethylene copolymer and the starchy material is within the range between 1:6 and 2: 1 and, preferably, within the range between 1:6 and 1:1 (Leo Col. 1 line 47-48).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,419,283 to Leo in view of U.S. Patent No. 6,178,922 to Denesuk and U.S. Patent Pub. No. US 6,926,916 to Day et al. and U.S. Patent No. 6,586,027 to Axelrod and The Chestnut Comes out of its Shell, The New York Times (nytimes.com), by Melissa Clark, [retrieved from internet 12 December 2007] 24 November 1999, 3 pages as applied to claim 1 above, and further in view of U.S. Patent No. 5,391,390 to Leo.

Regarding Claim 4, Leo '283 as modified teaches the addition of garlic and that the garlic can be produced by various methods, but is silent on explicitly teaching which the derivative of garlic is a powder which can be produced as a result of the formation of a suspension of garlic bulbs in water in a ratio by weight within the range between 1:2 and 1:5 and subsequent lyophilization of the suspension with a preliminary stage of cooling to -50C for from 4 to 8 hours followed by a heating stage with a duration of between 12 and 24 hours, to a temperature no greater than 50OC. However, Patent '390 to Leo teaches a known method of producing garlic powder (Leo '390 claim 1). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo '283 with the teachings of Leo '390 at the time of the invention since the modification is merely the an engineering design choice involving the selection of

known garlic production method selected to prevent the offensive day-after effect as taught by Leo '390.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,419,283 to Leo in view of U.S. Patent No. 6,178,922 to Denesuk and U.S. Patent Pub. No. US 6,926,916 to Day et al and U.S. Patent No. 6,586,027 to Axelrod and The Chestnut Comes out of its Shell, The New York Times (nytimes.com), by Melissa Clark, [retrieved from internet 12 December 2007] 24 November 1999, 3 pages as applied to claim 1 above, and further in view of U.S. Patent No. 5,618,518 to Stookey.

Regarding Claim 8, Leo as modified teaches the addition of edible lubricants, vitamins, proteins, mineral salts, flavouring, therapeutic substances, **dental care** products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50 and Col. 1 line 55-61), but is silent on explicitly teaching the mixture also comprises from 0.5 to 3, and preferably from 1 to 2, parts by weight of sodium hexametaphosphate per 100 parts by weight of degradable polymeric composition. However, Stookey teaches an animal chew toy with a dental additive of sodium hexametaphosphate (Stookey Abstract). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Leo with the teachings of Stookey at the time of the invention to prevent calculus as taught by Stookey. It would have been obvious to one of ordinary skill through routine tests and experimentation to derive the desired ratio of proportion of agents to optimize the system.

Response to Arguments

Applicant's arguments filed 15 October 2007 have been fully considered but they are not persuasive.

Leo as modified teaches the addition of edible lubricants, vitamins, proteins, mineral salts, flavouring, therapeutic substances, dental care products, products that enhance attractiveness of the toy (Leo Col. 2 line 46-50 and Col. 1 line 55-61).

Examiner maintains that Leo teaches the use of polyhydric alcohols (Leo Col. 1 line 57). Isomalt is a known polyhydric alcohol. Furthermore, the addition of isomalt can be viewed as the addition of a flavoring agent since Day teaches it is a known bulk sweetener. Day was only cited to support the old and notoriously well-known general knowledge that isomalt is a bulk sweetener.

In response to applicant's argument that chestnut flour has an energy value, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Chestnut flour is an old and notoriously well-known food ingredient (since before the time of the Romans) it is notoriously well-known for its sweet nutty flavor, source of vitamin C, sources of minerals, overall its flavor and nutrition, low caloric source of carbohydrates. The selection of chestnut flour is merely an obvious engineering design choice since it is merely the addition of a known flavouring agent and vitamin source. Leo teaches it is known to add vitamins and flavour enhancing ingredients.

Axelrod was cited merely to teach the general knowledge that raw hide is a known flavouring agent that is appealing to dogs. The modification is merely the application of a known animal chew toy ingredient to a known device to yield predictable results to enhance the animal's attraction to the toy.

The examiner maintains that Leo teaches the fundamental structure of the of the chew toy and all additional combinations are merely known flavour enhancing, nutrition enhancing, dental enhancing ingredients that would have been obvious to one of ordinary skill in the art. The modifications made above are obvious modifications that are merely the use of known techniques to improve to improve similar device yielding predictable results and choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success "obvious to try".

Conclusion

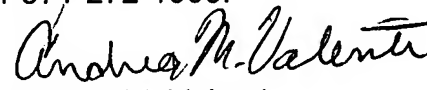
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 571-272-6895. The examiner can normally be reached on 7:00am-5:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Andrea M. Valenti
Primary Examiner
Art Unit 3643

12 December 2007